January 6, 1958

Dr. Harris Isbell
Addiction Research Center
U. S. Public Health Service Hospital
P. O. Box 2000
Lexington, Kentucky

Dear Dr. Isbell:

Thank you very much for your interesting and helpful report on the effects of epinephrine. Your findings in this regard agree completely with others that I am familiar with.

We are at present involved with the problem of assaying clinically the possible psychotomimetic effects of an alcoholic extract of a certain type of fungus. The chemist who is doing the isolation work originally used himself as guinea pig, but is now willing to turn this over to more talented hands. He found that 10 grams of the dried fungus produced a state of mental confusion involving visual illusions and possible hallucinations along with some "tingling on the skin and periodic breathlessness". To my knowledge, he has taken the fungus, both fresh and dried, at least four different times each from a different collection of the same fungus, including the sample that he is presently working with and each time has experienced the same effects. Further, he has prepared an ethanolic extract of this dried fungus and lyophilized it. 0.15 grams of this extract is equivalent to 1.0 grams of the original dried fungus. Our chemist tried a dose of this extract equivalent to a 10 gram dose of the fungus and reported effects equal to or greater than those he had previously experienced.

I am sending you approximately 20 grams of the extract under separate cover. You will find that the material is very hygroscopic and somewhat soluble in water. We have on hand a sufficient supply of the raw material to carry out extensive isolation experiments as soon as we have verified the activity of this preliminary extract. We intend to follow the extraction process routinely by animal testing backed up with an occasional abbreviated clinical trial. I am enclosing a copy of the animal work that has so far been carried out on this material along with a report on "unknown" LSD-25 from the same laboratory for comparison purposes. The large doses required for the "unknown" LSD-25 arise from the fact that we supplied the assay laboratory with a very dilute sample of solid material. The methods and procedures used in the laboratory doing this work for us and much of the

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actual training of the technicians involved was directly supervised by Ed Pelikan, who continues to follow the work done there on a consultant basis. I feel that knowing this, you will be better able to decide how much confidence that you wish to place in these results. If I can supply you with any other information about the material which will help you to get it to the point of clinical trial I'll be very glad to do so, as we are most anxious to get some expert evaluation of these effects.

I am also sending you five grams of synthetic material in which we are interested. This latter substance is the nitrogen analog of tetrahydrocannabinol (five-carbon side-chain). It is a pure compound and although it exists as the hydrochloride, it is not very soluble in water. We call the material C-5 and as you will see by the attached laboratory reports it has some interesting properties. I am including pharmacological reports on "unknown" C-9 (dimethyl-heptyl) from the same laboratory for comparison. As you will note from the doses, the "unknown" C-9 assayed was supplied in very dilute form.

A question that occurs to me in connection with clinical work on these compounds is whether it would help you if we made a routine assay of the cardio-vascular effects of such materials prior to sending them to you. I could probably get Carl to do this if you feel that it would serve a useful purpose. If you think of any other procedures that we might run, your suggestions would be appreciated.

Carl is sending me some samples of the material that Abood reported as having hallucinogenic effects at about 6-10 milligrams per dose. Carl feels that he has confirmed this effect in his subjects and so I am going to compare it with some of the standard materials in animals. If you would like a sample, I could easily send it along when it arrives here.

We hope to be able to visit you in the near future.

Sincerely,

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